To: Allen.Sorenson@state.co.us[Allen.Sorenson@state.co.us]; Brown - DNR,

Kirstin[kirstin.brown@state.co.us]

Cc: Brent Lewis (Brent\_Lewis@blm.gov)[Brent\_Lewis@blm.gov]

**Bcc:** Way, Steven[way.steven@epa.gov]

From: Way, Steven

**Sent:** Thur 7/2/2015 9:20:18 PM

Subject: Adit Flow Source Control / Flow Reduction Evaluation - Mogul and Gold King

Allen,

As we discussed, I have been interested in pursuing an evaluation of the Mogul mine bulkhead and potential to reduce the leakage / flow from the bulkhead area, and or other options. The Gold King is conditioned on the extent of access achieved following the portal rehab. Mark Rudolph is aware of this proposed plan (as is Doug J.) to assess the existing information and potentially conduct some limited investigations. The following summarizes the basic scope of work that might be appropriate to consider under the agreement with CDPHE mechanism. The proposed level of funding is \$15 K for each mine.

- 1. Collect existing site/mine information from appropriate sources regarding mine maps, geologic mapping, construction reports, and other related information to evaluate conditions at the site to develop plans to investigate source control measures. This may include assessing the geology / geotechnical conditions to determine existence of fracturing and other factors contributing to permeability. Furthermore evaluate the potential application of formation grouting to reduce leakage around the bulkhead.
- 2. Assess other mine openings, such as shafts and adits, that may be effected by the change in pressure if source control were implemented.
- 3. Perform onsite inspections and field mapping to identify and document current conditions.
- 4. Propose other investigation tasks that may be appropriate to determine feasibility and obtain design related data for implementing source control measure.
- 5. Provide a written summary of the historical / existing data and findings that will assist is assessing the options to reducing flow from the adits.
- 6. Schedule: Complete this activity by 11/30/2015???
- 7. The goal is to identify potential response actions that may be implemented within the next field season depending on costs.

Let me know your thoughts on this concept and scope. We probably need to get Mark something sooner than later given the nature of these agreements and set up time. We can discuss this next week if you want.

Happy 4th of July,

Steve

Steven Way

Federal On-Scene Coordinator

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